

**Notice of Allowability**

Application No.

09/684,076

Examiner

Johnna R. Loftis

Applicant(s)

CHERNEFF ET AL.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed April 11, 2006.
2. ☒ The allowed claim(s) is/are 2,4-10,12-23,25-30,32-38 and 40-45.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.


**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☒ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892) *no 892*
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 20060621.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
TARIQ R. HAFIZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Steven Laureanti on 6/21/06.

The application has been amended as follows:

Claims 2, 4-10, 12-23, 25-30, 32-38 and 40-45 are allowed.

Please cancel claims 11, 24 and 39.

Claims 2, 4, 9, 22, 32 and 37 are Currently Amended.

Claims 5-8, 10, 12-21, 23, 25-30, 33-36, 38, 40-45 are Previously Presented

Claim 2. (Currently Amended) A method for scheduling development planning for a plurality of products of an enterprise, comprising:

Receiving a list of a plurality of products to be developed; receiving a list of required completion dates, each completion date specifying the completion date for the development of a corresponding product in the plurality of products; receiving, for each product in the plurality of products, a project definition of a project for developing the product, each project definition defining: a plurality of phases associated with the project for development the product, the plurality of phases having a plurality of tasks required to complete a project for developing the product associated with the project definition; and a list of resources required to complete each task defined in the product definition, at least one of the plurality of tasks for at least one of the

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plurality of projects requiring a material to be provided by an outside party distinct from the enterprise; receiving a list of available resources, each resource in the list of available resources comprises: a capacity level, representing a function of time available to each resource; an availability level, representing a function duration available to each resource; and an ability level, including at attribute level, representing a function of work characteristic capable of being performed by each resource and a competency level, representing a function of competence of each resource; receiving, for each task associated with each phase of the project definition requiring a resource, a specified minimum ability level of one of more resources to be used for that task; receiving a list of materials available from outside parties distinct from the enterprise and a schedule of availability of the materials available from the outside parties; and maintaining a scheduler operable to automatically generate a development schedule comprising all tasks for all projects, the development schedule allocating the resources such that each resource is allocated at a level less than or equal to its capacity, the development schedule also allocating the resources that have an ability level at least as high as the specified minimum ability level, the development schedule also scheduling tasks that require materials from outside parties at a time when such materials will be available; monitoring the materials identified in the list of materials from outside parties distinct from the enterprise using one or more supply chain tools operable to monitor the outside parties; and automatically modifying the development schedule based on material availability information obtained by the one or more supply chain tools.

Claim 4. (Currently Amended) A system for scheduling development planning for a plurality of products of an enterprise, comprising:

a list of a plurality of products to be developed; a list of required completion dates, each completion date specifying the completion date for the development of a corresponding product in the plurality of products; for each product in the plurality of products, a project definition of a project for developing the product, each project definition defining: a plurality of phases associated with the project for development the product, the plurality of phases having a plurality of tasks required to complete a project for developing the product associated with the project definition; and a list of resources required to complete each task defined in the product definition, at least one of the plurality of tasks for at least one of the plurality of projects requiring a material to be provided by an outside party distinct from the enterprise; a list of available resources, each resource in the list of available resources comprises: a capacity level, representing a function of time available to each resource; an availability level, representing a function duration available to each resource; and an ability level, including at attribute level, representing a function of work characteristic capable of being performed by each resource and a competency level, representing a function of competence of each resource; for each task associated with each phase of the project definition requiring a resource, a specified minimum ability level of one of more resources to be used for that task; a list of materials available from outside parties distinct from the enterprise; a scheduler operable to automatically generate a development schedule comprising all tasks for all projects, the development schedule allocating the resources such that each resource is allocated at a level less than or equal to its capacity, the development schedule also allocating the resources that have an ability level at least as high as the specified minimum ability level, the development schedule also scheduling tasks that require materials from outside parties at a time when such materials will be available; the scheduler

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further operable to: monitor the materials identified in the list of materials from outside parties distinct from the enterprise using one or more supply chain tools operable to monitor the outside parties; and automatically modify the development schedule based on material availability information obtained by the one or more supply chain tools.

Claims 5-8 (as Previously Presented)

Claim 9. (Currently Amended) The method of Claim 2, wherein the plurality of tasks are defined in a hierarchy specifying relationships among related tasks, at least one task comprising a plurality of sub-tasks, each ~~leaf tasks~~ sub-task being associated with an identification of one or more resources for performing the leaf task.

Claim 10 (as Previously Presented)

Claim 11 (Cancelled)

Claims 12-21 (as Previously Presented)

Claim 22. (Currently Amended) The system of Claim 4, wherein the plurality of tasks are defined in a hierarchy specifying relationships among related tasks, at least one task comprising a plurality of sub-tasks, each ~~leaf tasks~~ sub-task being associated with an identification of one or more resources for performing the leaf task.

Claim 23 (as Previously Presented)

Claim 24 (Cancelled)

Claims 25-30 (as Previously Presented)

Claim 31 (Cancelled)

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Claim 32 (Currently Amended) Software for scheduling development planning for a plurality of products of an enterprise, the software being embodied in computer-readable media and when executed operable to:

Receive a list of a plurality of products to be developed; receive a list of required completion dates, each completion date specifying the completion date for the development of a corresponding product in the plurality of products; receive, for each product in the plurality of products, a project definition of a project for developing the product, each project definition defining: a plurality of phases associated with the project for development the product, the plurality of phases having a plurality of tasks required to complete a project for developing the product associated with the project definition; and a list of resources required to complete each task defined in the product definition, at least one of the plurality of tasks for at least one of the plurality of projects requiring a material to be provided by an outside party distinct from the enterprise; receive a list of available resources, each resource in the list of available resources comprises: a capacity level, representing a function of time available to each resource; an availability level, representing a function duration available to each resource; and an ability level, including at attribute level, representing a function of work characteristic capable of being performed by each resource and a competency level, representing a function of competence of each resource; receive, for each task associated with each phase of the project definition requiring a resource, a specified minimum ability level of one of more resources to be used for that task; receive a list of materials available from outside parties distinct from the enterprise and a schedule of availability of the materials available from the outside parties; and maintain a scheduler operable to automatically generate a development schedule comprising all tasks for all

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projects, the development schedule allocating the resources such that each resource is allocated at a level less than or equal to its capacity, the development schedule also allocating the resources that have an ability level at least as high as the specified minimum ability level, the development schedule also scheduling tasks that require materials from outside parties at a time when such materials will be available; monitor the materials identified in the list of materials from outside parties distinct from the enterprise using one or more supply chain tools operable to monitor the outside parties; and automatically modify the development schedule based on material availability information obtained by the one or more supply chain tools.

Claims 33-36 (as Previously Presented)

37. (Currently Amended) The software of Claim 32, wherein the plurality of tasks are defined in a hierarchy specifying relationships among related tasks, at least one task comprising a plurality of sub-tasks, each ~~leaf tasks~~ sub-task being associated with an identification of one or more resources for performing the leaf task.

38 (as Previously Presented)

Claim 39 (Cancelled)

Claims 40-45 (as Previously Presented)

2. The following is an examiner's statement of reasons for allowance: The cited prior art taken alone or in combination fails to teach the claimed invention set forth in claims 2, 4-10, 12-23, 25-30, 32-38 and 40-45. Specifically, the invention set forth is directed to scheduling development for a plurality of products wherein for each product a plurality of phases having a plurality of tasks associated are defined wherein a list of resources is compiled wherein material

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is required to be provided by an outside party and available resources each comprise a capacity level, an availability level, an ability level and a competency level. For each task, a specified minimum ability level is set and wherein the scheduler is operable to generate a development schedule comprising all tasks wherein resources are allocated at a level less than or equal to its capacity, resources are allocated at an ability level at least as high as the specified minimum ability level and the outside materials are monitored using one or more supply chain tools wherein the development schedule is automatically modified based on the material availability information obtained by the one or more supply chain tools.

3. The prior art references most closely resembling the Applicant's claimed invention are Lilly et al, US 5,787,000, Dietrich et al, US 5,548,518 and Fields et al, US 5,111,391.

4. First, Lilly et al, teaches coordinating resources for a plurality of products and maintaining a scheduler to generate a development schedule comprising all tasks wherein each project comprises a project definition made up of phases with associated tasks. In addition Lilly teaches determining a list of resources needed for each project. Lilly et al, however, does not teach using supply chain tools to monitor material resources from outside parties identified in the list of materials. Nor does Lilly teach automatically modifying the development schedule based material availability information obtained by the supply chain tools.

5. Second, Dietrich et al, teaches a scheduling system wherein an external availability schedule is used to determine if material will meet requirements in scheduling product development. However, Dietrich et al does not teach using supply chain tools to monitor material resources from outside parties identified in the list of materials. Nor does Dietrich et al



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teach automatically modifying the development schedule based material availability information obtained by the supply chain tools.

6. Third, Fields et al teaches a scheduling system wherein required skill levels for each task are defined and wherein each resource being assigned to the tasks have an associated skill level along with capacity, availability and competency levels. The resources are then assigned to tasks based on the minimum skill level. Fields et al, however, does not teach using supply chain tools to monitor material resources from outside parties identified in the list of materials. Nor does Fields et al teach automatically modifying the development schedule based material availability information obtained by the supply chain tools.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance." Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnna R. Loftis whose telephone number is 571-272-6736. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JL

6/21/06



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